Vineyard Notes By David Lockwood, Professor U.T. Plant and Soil Science

Vineyard Site Development

Perhaps you have heard it said that site selection is the most important of the thousands of management decisions that will be made throughout the life of the vineyard. Everything that happens in that vineyard will, to a certain degree, be influenced by the site. This influence could be either good or bad. Characteristics of good vineyard sites include elevated, gently sloping (north ot northeast exposure) fields with low to moderately fertile soils having good internal and surface drainage plus a rooting depth of 30 inches or more.

Once a location for the vineyard has been identified, site preparation probably becomes the most important aspect of vineyard development. Site preparation practices can affect vine survival and growth, yields and fruit quality, life expectancy of the planting and cost of production. Some aspects of site preparation can never be addressed once vines are in the ground while others may, however, the cost is apt to be higher and the results less effective. The vineyard may require longer to reach its potential, if it ever will.

If the vineyard site is wooded, tree removal should be done several years in advance of planting so that roots remaining in the soil will have time to decompose and the vineyard floor could be properly prepared. If the site is cleared, preparation should start at least 6 to 12 months in advance of planting.

Preplant soil testing is a valuable tool that is often overlooked. Adjustment of soil pH and nutrient levels help to get plants off to a good start and make it easier to keep soil nutrient conditions at levels favorable to quality fruit production. The basic test, which includes pH, phosphorus and potassium should be requested along with magnesium. Information and supplies for soil testing may be obtained at your county extension office.

Sample at two depths, one in the upper 8 inches of soil and a second sample at the 8 to 16 inch depth. If the soil type and the growing conditions appear to be uniform, collect some soil from about 20 locations over an area not to exceed 3 to 4 acres. Thoroughly mix the soil in a clean plastic bucket being sure to keep samples from the two different depths separate. If there is an area in the field that appears to have a different soil type or where growth appears different, sample this area separately.

Prior to planting is the best time to control noxious weeds like blackberries, poison ivy and Johnsongrass. Several good, non-persistent herbicides are labeled for use on noncropland sites but are not safe or labeled to be used once vines are in the ground. Information concerning weed control and herbicides may also be obtained at your county extension office.

If the field is fairly level, lime and fertilize according to soil test results and then plow to help incorporate these materials. Fields could then be seeded in the fall to the desired vineyard floor cover. If the site is not level and has a good sod cover, stake out the rows and spray a 4 to 6 foot wide strip with Roundup where the row will be in late summer. For maximum results, Roundup should be applied at least a couple weeks prior to the first killing frost in fall. The areas between the rows could be mowed after the Roundup has been applied and had time to work.